

PATENT SPECIFICATION



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426,879

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Complete Specification Accepted: April 11, 1935.

PROVISIONAL SPECIFICATION

Improvements in and relating to Collapsible Tubes for Pastes and Viscous Liquids

I, EDWARD HACK, 77 & 79, Farringdon Road, London, E.C.1., British, do hereby declare the nature of this invention to be as follows:—

- 5 This invention relates to collapsible tubes for pastes and viscous liquids and has for its object to provide an improved container of this type from which the extraction of the contents is facilitated.
- 10 The tube according to the present invention is provided with a rigid member of elongated form which is adapted to act as a roller upon which the empty portion of the tube may be rolled. This rigid member also serves to press the tube in a uniform manner thereby facilitating the extraction of the contents. The rigid member may either be fixed to the tube or detachable therefrom. Thus it may be fixed to, or made integral with the clip normally used to close the end of the tube, or it may be formed in such a manner that it engages the end of the tube, and can be disengaged therefrom when desired.
- 25 The Rigid member is preferably of substantially cylindrical form and of a length

equal to the width of the tube when pressed flat.

A preferred form of rigid member according to the present invention is 30 hollow and adapted to form a case or holder for articles or materials which are normally employed in conjunction with the paste or viscous liquid in the tube. For example if the tube contains shaving 35 cream, a styptic pencil may be provided in the holder in the rigid member. Other examples are face-cream and lipstick, adhesive and brush, petroleum jelly and a roll of sticking plaster.

When the rigid member is detachable from the tube it preferably comprises a spring clip device for gripping the tube, or alternatively, it is provided with a longitudinal groove which is wider near 45 the centre of the member than it is near the exterior surface thereof and the end of the tubes carries an enlarged portion adapted to engage within the groove by means of a lateral sliding movement. 50

Dated the 12th day of October, 1933.
EDWARD HACK.

COMPLETE SPECIFICATION

Improvements in and relating to Collapsible Tubes for Pastes and Viscous Liquids

I, EDWARD HACK, a British Subject, of 77 & 79, Farringdon Road, London, E.C.1., do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to collapsible tubes for pastes and viscous liquids and has for its object to provide an improved container of this type from which the extraction of the contents is facilitated.

The tube according to the present invention is provided with a rigid member 65 of elongated form which itself forms a case or holder for a second article or material and acts as a roller upon which the empty portion of the tube may be rolled. This rigid member also serves to

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press the tube in a uniform manner thereby facilitating the extraction of the contents. I am aware that hollow rollers, as shown for instance in specification No. 200,579, have been proposed; but I am not aware of any suggestion of such a roller forming a case or holder for a second material.

The rigid member may either be fixed to the tube or detachable therefrom. Thus it may be fixed to, or made integral with the clip normally used to close the end of the tube, or it may be formed in such a manner that it engages the end of the tube, and can be disengaged therefrom when desired.

The rigid member is preferably of substantially cylindrical form and of a length equal to the width of the tube

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when pressed flat.

A preferred form of rigid member according to the present invention has a cap arranged to form a mount or carrier 5 for articles or materials which are normally employed in conjunction with the paste or viscous liquid in the tube. For example if the tube contains shaving cream, a styptic pencil may be mounted 10 in the cap. Other examples are face-cream and lipstick, adhesive and brush, petroleum jelly and a roll of sticking plaster.

When the rigid member is detachable 15 from the tube it preferably comprises a spring-clip device for gripping the tube, or alternatively, it is provided with a longitudinal groove which is wider near the centre of the member than it is near 20 the exterior surface thereof and the end of the tube carries an enlarged portion adapted to engage within the groove by means of a lateral sliding movement.

The invention is illustrated by the 25 accompanying drawings in which Figure 1 is a perspective view,

Figure 2 a section of the lower portion of Figure 1,

Figure 3 a similar section of an 30 alternative arrangement, and

Figure 4 a fragmentary plan view.

As shown in Figures 1 and 2 the collapsible tube 1 is engaged at its bottom end by one or more teeth or projections 35 2 struck up from the tube 3 which forms a case or holder for an article or material 6 mounted in a short tube 4 which is a sliding fit in the tube 3, and is provided with a convenient head 5 thus forming 40 both a cap for the case or holder and a mount or carrier for the article or material 6. The material is shown partially withdrawn. As may be seen from Figure 2 the projections 2 are passed 45 through the material of the bottom of the collapsible tube 1 and can then be bent in to retain it firmly.

As shown at Figure 3 the tube 3 is bent 50 to form a longitudinal groove 7 within which a roll or enlargement 8 at the bottom of the collapsible tube 1 is

retained. The tube can be slid into the groove from the end, or alternatively the tube 3 may be of the nature of a spring clip or a somewhat soft metal clip which can be closed against the tube with the latter in position and it may be provided with teeth or projections as indicated at 9 in Figure 4.

The above forms are given as examples only, as clearly numerous other constructions will suggest themselves.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. The combination with a collapsible tube for pastes and viscous liquids of a rigid case for a second material arranged to act as a roller upon which the empty portion of the tube may be rolled.

2. A case or holder having a cap forming a mount or carrier for an article or material and provided with means to attach it to the bottom of a collapsible tube to act as a roller upon which the empty portion of the tube may be rolled.

3. A collapsible tube having attached along its bottom edge a hollow roller provided with a cap and forming a case or holder for a second article or material.

4. The combination with a collapsible tube containing a paste or viscous liquid of a holder attached along its bottom edge and containing an article or material to be employed in conjunction with the contents of the tube.

5. The combination of Claim 1 or Claim 4 in which the cap of the case or holder forms a mount or carrier for the article or material therein.

6. The improved combined collapsible tube and holder and the improved holders for attachment to collapsible tubes substantially as described or as illustrated upon the accompanying drawings.

Dated the 12th day of October, 1934.
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[This Drawing is a reproduction of the Original on a reduced scale.]

Fig. 1.

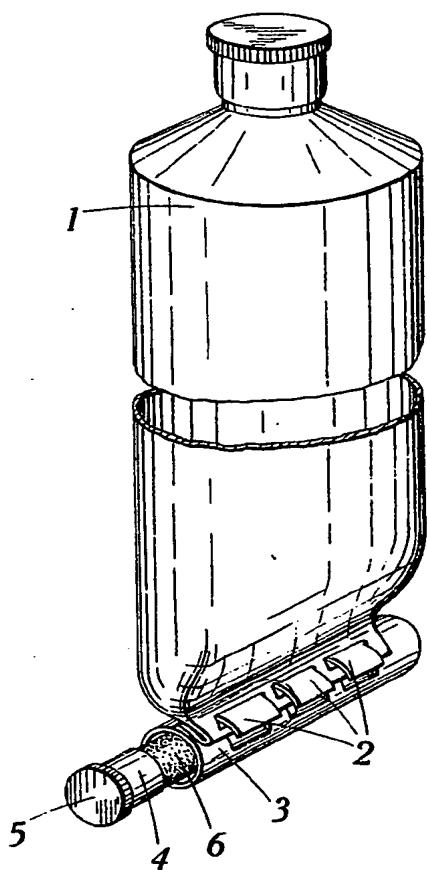


Fig. 2.

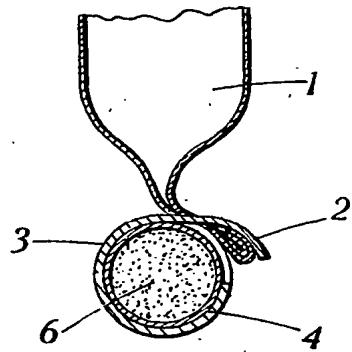


Fig. 3.

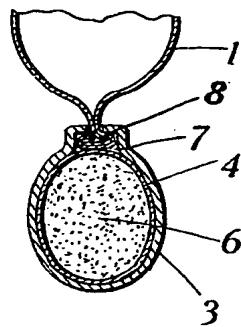
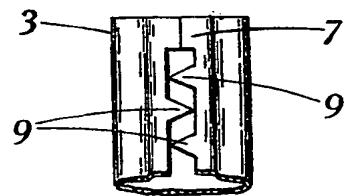


Fig. 4.



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